

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1, 3-7 and 20-33 are present in the application, and stand rejected under 35 U.S.C. § 112, first paragraph, and under 35 U.S.C. § 103(a) over JP 2002-226926 (Yamauchi) in view of U.S. 2002/0015878 (Tsumura).

With regard to the §112, first paragraph, rejection the Applicants note that the Office Action does not provide any detail as to why the particular claim language was found not to be supported by the specification. The claims are supported by at least page 8, line 21 - page 9, line 1 and page 15, line 14 - page 16, line 14. For example, platinum-containing particles are nitrized to produce a platinum-containing nitride material, and the size of the material may be downsized to “nanosize.” In other words, the platinum-containing nitride material contains nanosized platinum-containing nitride particles. Pages 15 and 16 describe the process of generating the particles to produce a catalyst material having catalyst particles with an average diameter of 0.5 -500 nm. Withdrawal of the § 112, first paragraph, rejection is respectfully requested.

As pointed the previous responses filed April 25 and May 9, 2007, the method taught by Yamauchi<sup>1</sup> will not produce particles in the range recited in claims. A detailed explanation was provided, along with webpages describing the methods used by Yamauchi to produce particles. The methods taught in Yamauchi use rapid cooling or cooling in a weightless state. The molten mixture is rapidly cooled by a twin-roll method as described in examples 1 and 4, rapidly cooled by an atomization method as described in example 3, or pneumatically atomized and solidified during free fall as described in examples 2 and 5-7. These explanations were not found persuasive because the Applicants have “not provided factual support that proves that the particles made by Yamauchi produces particles outside

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<sup>1</sup> References are to the machine translation.

the range as claimed. ... No direct comparison of the Applicant's invention and prior art disproving the Examiner's position has been provided."<sup>2</sup>

Claims 1, 6 and 7 recite "an average diameter of the catalyst particles being 0.5 nm to 500 nm." The Applicants have provided the attached Declaration from one of the inventors demonstrating that such particles will not be produced the twin-roll method, atomization method or pseudo-zero gravity method taught by Yamauchi. Instead, particles greater than 10 microns result. The Applicants, by the Declaration, have provided factual evidence that particles outside the claimed range will be produced. Withdrawal of the rejection based upon Yamauchi is respectfully requested.

This response is submitted under 37 C.F.R. § 1.116. The response was not earlier submitted since the Applicants needed time to produce and analyze the materials described in the Declaration. Full consideration of the Declaration and this response is appropriate, and is therefore respectfully requested.

It is respectfully submitted that the present application is in condition for allowance, and a favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



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Eckhard H. Kuesters  
Registration No. 28,870

Carl E. Schlier  
Registration No. 34,426  
Attorneys of Record

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/07)

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<sup>2</sup> Advisory Action dated May 23, 2007